Coombes M.

21st Century Labour Market Areas: concept, methods, applications.

***Presented at: Labour Market Areas: current development and future use*.**

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21st century labour market areas: concept, methods, applications

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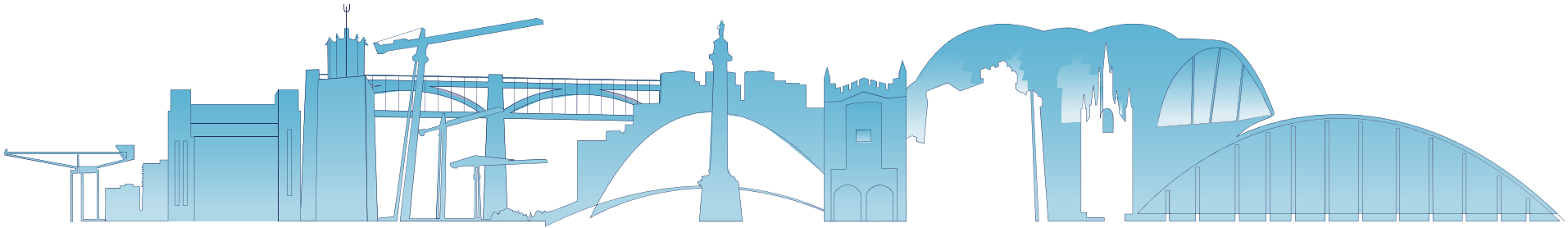

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Addressing these four *Questions* structures the following presentation

Eurostat commissioned the CURDS (1992) identification of 9 principles for defining LMAs, plus the recent report with Alicante University to revisit the issue…

Principle	Practice (source: CURDS report 1992)
OBJECTIVES	
1. Purpose	**To be statistically-defined areas appropriate for policy**
2. Relevance	**Each area to be an identifiable labour market**
CONSTRAINTS	
3. Partition	**Every building block to be allocated to 1 and only 1 area**
4. Contiguity	**Each area to be a single contiguous territory**
CRITERIA ***in descending priority***	
5. Autonomy	**Self-containment of flows to be maximised**
6. Homogeneity	**Areas' size range to be minimised (eg. within fixed limits)**
7. Coherence	**Boundaries to be reasonably recognisable**
8. Conformity	**Alignment with administrative boundaries is preferable**
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The recent study with Alicante University recognised that many users prefer results with more Detail viz: the wish is for the set of LMAs with as many as possible separate areas which all meet the other criteria

Answer1: Current best practice in defining LMAs

Early conceptualisations of labour market areas had a centre-and-hinterland model but this has had to be abandoned as greater mobility fostered more polycentric LMAs…
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The 9 (+1) Principles for defining LMAs pose a multi-criteria problem to definition methods: newer computationally-intensive methods (eg. GEA) can use a multi-criteria function to optimise their results, but their stochastic element means they don't give the same result repeatedly…which is problematic as the study with Alicante University noted that found policy users prioritise ***transparency*** (ie. favouring deterministic methods)

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Despite its many iterations making it less 'transparent' in the sense of easy visualisation, the replicability of results from the TTWA method makes it sufficiently transparent, while its ability to work with very different types of zone gives it strong transferability, and its implicit objective of identifying interaction clusters, regardless of structure, enables it to identify diverse types of LMAs (eg. polycentric or centre-and-hinterland)

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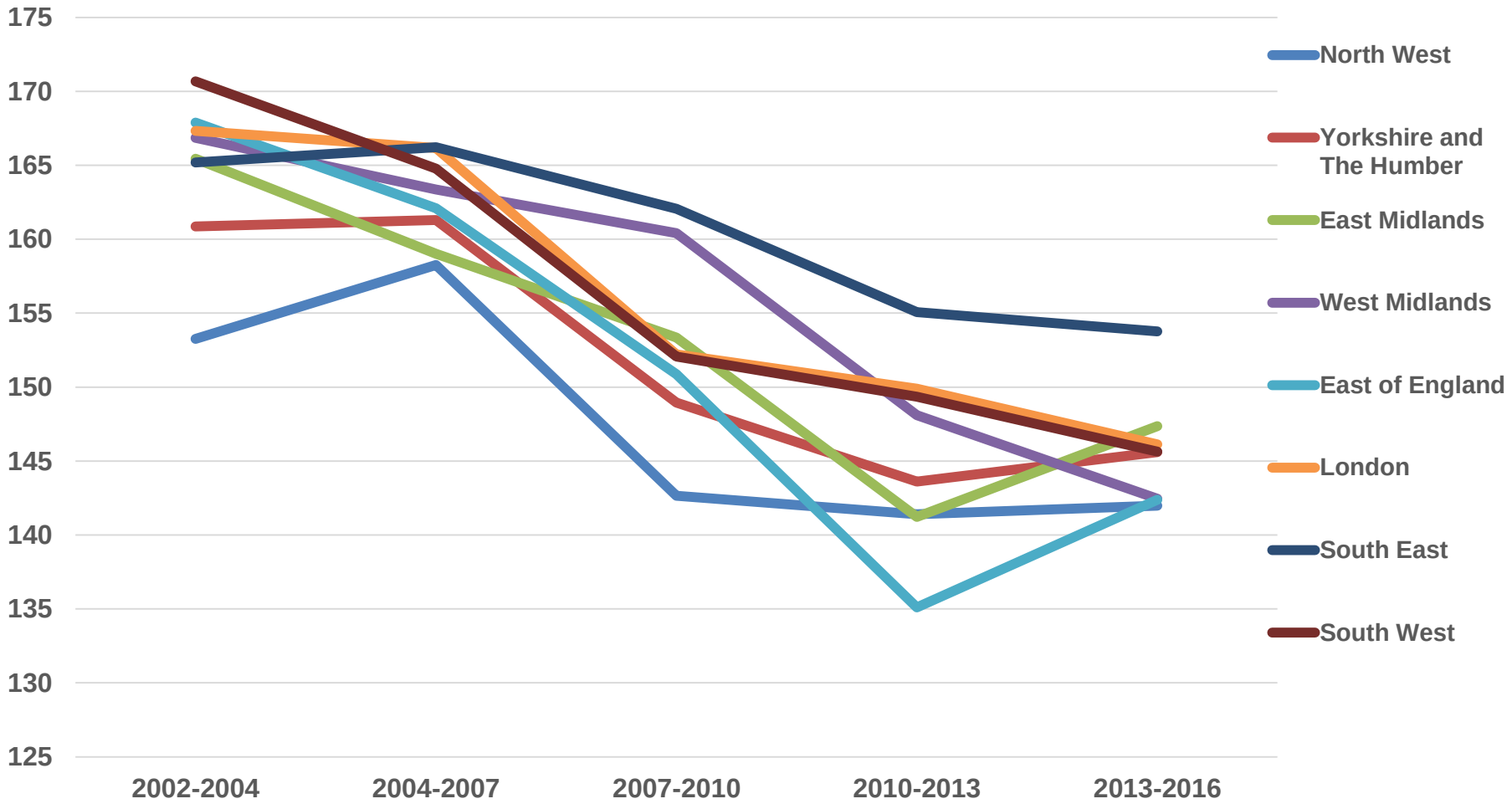
HOWEVER the availability of ANY nationally consistent commuting flow data for suitably small areas becomes scarcely possible if a Census is replaced by a rolling survey *or* administrative data (other than Scandinavian-style comprehensive register data)

In all regions commuting trips per person per year have fallen



Answer3 Changing labour markets and their impact on LMAs

key changes eroding the traditional 'working week' model of local labour markets

Part-time working increasingly widespread:	**fewer commuting trips per week**
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Ultimately 'friction of distance' (in cost and inconvenience) limits frequent long-distance commuting to a minority, so the localised LMAs continues to reflect majority behaviour

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Returning to the aim to devise definitions interpreting the concept of LMAs, it is recognised an objective still to be met is that all LMAs have internally cohesive commuting flows

Annex

Champion *et al* (Reg.Stu. 43:1245-59) summarised existing 'people and places' factors related to commuting length:

Longer commuting journeys in middle working age

Men more likely than women to commute longer distances

HRP more likely to commute longer distances than other household members

Member of a single-earner household is likely to commute further than the average of all members of a multi-earner household

Female HRP with a dependent child is not likely to commute as far as others due to child-minding commitments

People without access to cars are more likely to commute shorter distances due to a reliance on walking, cycling and public transport

Full-time employees more likely to commute further than the full-time, self-employed and part-timers

Longer commuting distances for higher-level non-manual occupations

Shorter commuting journeys in the primary sector

Longer commuting journeys for people with at least a first degree

Longer commuting journeys in South Eastern England due to the effect of London

Longer commuting journeys for those living in more rural areas due to greater sparsity of jobs there

Longer commuting journeys for those living in smaller settlements due to the concentration of jobs in larger urban areas

Longer commuting journeys for those living in areas where a higher proportion of working-age people are in employment due to a greater demand for jobs locally

Simulating missing commuting data

Estimating commuting flows is possible with data on employed people (at home) and on jobs (at workplace): in effect, the model 'fills' jobs with 'neighbours'

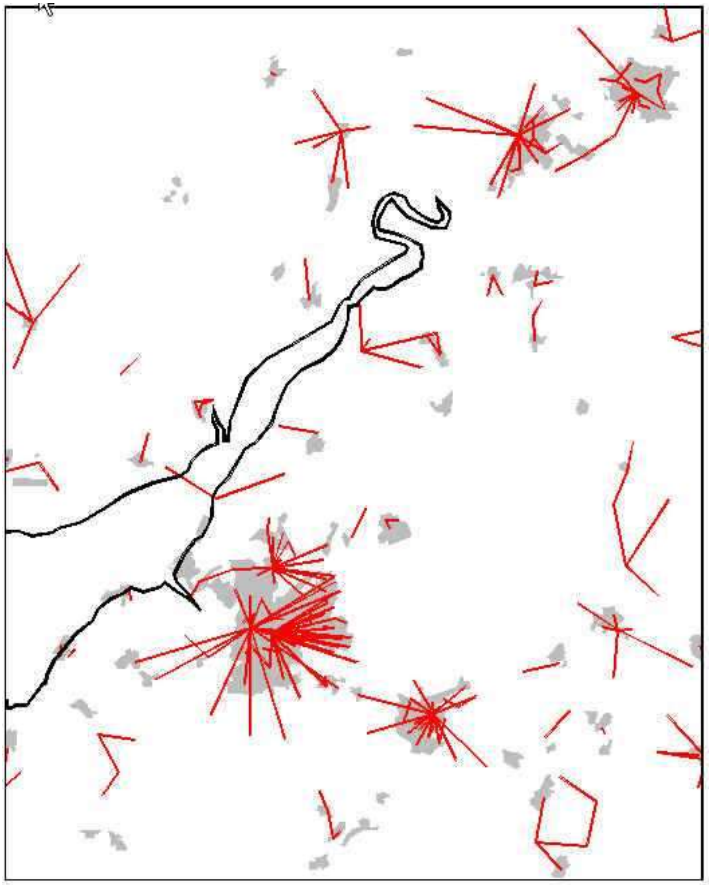
1. Assign jobs in each area to the same area's residents so far as possible

2. Identify each area as having *either* surplus jobs *or* surplus residents *or* a balance (*ie.* all jobs/residents assigned)

3. Proceed through all area-area pairs, in ascending order of distance apart:

3.1 STOP if the next pair are too far apart for commuting to be plausible, otherwise go on

3.2 *if* one of that pair of wards has surplus jobs and the other surplus residents, fill as many surplus jobs as possible with these residents and update the areas' surplus/balance status; then return to step 3.1.



[sample results in SW England]